AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

Listing Of Claims

1. (Currently Amended) A computer-aided selection method for a part of a volume, comprising:

evaluating, using a computer, only a selected part of the volume,

wherein the selected part is in the form of a polyhedron with polyhedron surfaces, with each polyhedron surface being bounded by polyhedron edges and with each polyhedron edge being bounded by polyhedron corners bounding only two polyhedron surfaces,
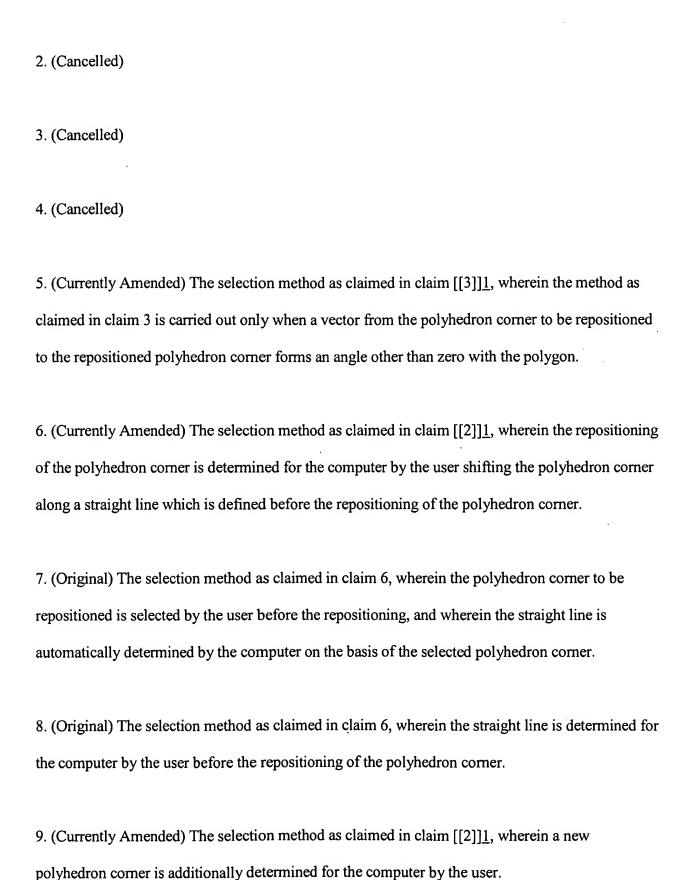
wherein the polyhedron corners are for the computer in order to determine the selected part,

[[and]]

wherein the polyhedron edges and polyhedron surfaces are determined automatically by the computer on the basis of the polyhedron corners[[.]],

wherein a user determines repositioning for one of the polyhedron corners for the computer,

wherein the computer then redetermines those polyhedron edges and polyhedron surfaces which contain the repositioned polyhedron corner in order to determine the selected part,

wherein at least one of the polyhedron surfaces which contain the polyhedron corner to be repositioned is in the form of a polygon with more than three polyhedron corners, and

wherein the at least one polyhedron surface is replaced by the computer by polyhedron surfaces which are in the form of triangles, each containing one polyhedron edge which is not bounded by the polyhedron corner to be repositioned of the polygon as well as the repositioned polyhedron corner.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) The selection method as claimed in claim [[3]]1, wherein the method as claimed in claim 3 is carried out only when a vector from the polyhedron corner to be repositioned to the repositioned polyhedron corner forms an angle other than zero with the polygon.

6. (Currently Amended) The selection method as claimed in claim [[2]]1, wherein the repositioning of the polyhedron corner is determined for the computer by the user shifting the polyhedron corner along a straight line which is defined before the repositioning of the polyhedron corner.

7. (Original) The selection method as claimed in claim 6, wherein the polyhedron corner to be repositioned is selected by the user before the repositioning, and wherein the straight line is automatically determined by the computer on the basis of the selected polyhedron corner.

8. (Original) The selection method as claimed in claim 6, wherein the straight line is determined for the computer by the user before the repositioning of the polyhedron corner.

9. (Currently Amended) The selection method as claimed in claim [[2]]1, wherein a new polyhedron corner is additionally determined for the computer by the user.

10. (Original) The selection method as claimed in claim 9, wherein the new polyhedron corner is determined by selection of at least one of a polyhedron edge a polyhedron surface, and by subsequently placing the new polyhedron corner within the at least one of the selected polyhedron edge and polyhedron surface.

11. (Currently Amended) The selection method as claimed in claim [[2]]1, wherein an unnecessary polyhedron corner is deleted by the user.

12. (Original) The selection method as claimed in claim 11, wherein the deletion of the unnecessary polyhedron corner by the computer is permitted only when the unnecessary polyhedron corner is a common polyhedron corner of at least two mutually adjacent polyhedron surfaces which lie on a common plane.

13. (Currently Amended) The selection method as claimed in claim [[2]]1, [[`]]wherein at least one of the polyhedron surfaces which contain the polyhedron corner to be repositioned is a polygon with more than three polyhedron corners, and wherein the user inserts an additional polyhedron edge which is bounded by two polyhedron corners, which were previously not immediately adjacent, of the polygon.

14. (Original) The selection method as claimed in claim 13, wherein an unnecessary polyhedron edge is deleted by the user.

15. (Original) The selection method as claimed in claim 14, wherein the deletion of the unnecessary

polyhedron edge by the computer is permitted only when the polyhedron surfaces which are

adjacent to the unnecessary polyhedron edge lie on a common plane.

16. (Original)   A storage medium in which machine-legible digital control signals are stored, which

interact with a computer in such a way that, when they are executed by the computer they result in a

selection method as claimed in claim 1.

17. (Currently Amended) A computer program product having machine-legible digital program

code which is stored in a ~~data storage~~computer readable medium, for carrying out a selection

method as claimed in claim 1 when the program code is executed by a computer.

18. (Currently Amended) A computer program embedded in a computer readable medium with

digital program code for carrying out a selection method as claimed in claim 1 when the program

code is executed by a computer.

19. (Original) A computer which is programmed to carry out a selection method as claimed in claim

1.

20. (Original) The method of claim 1, further comprising: displaying the selected part of the volume

via an output medium.

21. (Currently Amended) The selection method as claimed in claim [[3]]1, wherein the method as

claimed in claim 3 is carried out only when a vector from the polyhedron corner to be repositioned

to the repositioned polyhedron corner forms an angle other than zero with the polygon.

22. (Currently Amended) The selection method as claimed in claim [[2]]1, wherein a new

polyhedron corner is additionally determined for the computer interactively by the user.

23. (Currently Amended) The selection method as claimed in claim [[2]]1, wherein an unnecessary

polyhedron corner is deleted by the user interactively.

24. (Original) The selection method as claimed in claim 13, wherein an unnecessary polyhedron

edge is deleted by the user interactively.

25. (New) A computer-aided selection method for a part of a volume, comprising:

evaluating, using a computer, only a selected part of the volume,

wherein the selected part is in the form of a polyhedron with polyhedron surfaces, with each

polyhedron surface being bounded by polyhedron edges and with each polyhedron edge being

bounded by polyhedron corners bounding only two polyhedron surfaces,

wherein the polyhedron corners are for the computer in order to determine the selected part,

wherein the polyhedron edges and polyhedron surfaces are determined automatically by the

computer on the basis of the polyhedron corners,

wherein a user determines repositioning for one of the polyhedron corners for the computer,

wherein the computer then redetermines those polyhedron edges and polyhedron surfaces

which contain the repositioned polyhedron corner in order to determine the selected part,

wherein at least one of the polyhedron surfaces which contain the polyhedron corner to be

repositioned is a polygon with more than three polyhedron corners,

wherein the at least one polyhedron surface is replaced by the computer by two polyhedron

surfaces, and

wherein one of the two polyhedron surfaces is defined by the polyhedron corners of the polygon which are not to be repositioned, and an other of the two polyhedron surfaces is defined by those polyhedron corners of the polygons which are immediately adjacent to the polyhedron corner to be repositioned, and by the repositioned polyhedron corner.